

BABT

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To FCC

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Overall Assessment Letter for Ericsson Mobile Broadband Module F3507g FCC id: VV7-MBMF3507G-D

I have reviewed this Class 2 Permissive change and find it compliant.

This is an application to permit installation of this module in a Dell Laptop which also includes a Bluetooth Module and one of two WLAN modules which can co-transmit with this module.

F3507g has been assessed for installation in the Dell Inspiron 1010 laptop model. This laptop, within which the F3507g module is being integrated supports Laptop mode only. The identification for each applicable module is provided in the Cover letter from Ericsson.

Please note the following:

1: FCC Permissions

Due to the laptop having a display size < 12 inches, the test lab obtained permission through a KDB inquiry to test the device in accordance with KDB 616217 and permission was granted.

This filing includes transmitters for which all antennas apart from Bluetooth are located in the laptop display screen at a distance of greater than 15cm from the user. These antennas are all located at a distance of greater than 5cm of each other apart from one configuration of WLAN antenna and WWAN antenna. For this specific configuration where the WWAN and WLAN are spaced < 5 cm in specific laptop arrangement subject to simultaneous transmit SAR evaluation per KDB 616217, for this case the sum-of-SAR criteria may be used to determine simultaneous transmit SAR evaluation requirement. This filing has been permitted for processing by BABT and this permission has been granted by the FCC through a KDB inquiry.

2: HSPA PBA Justified

This C2PC would require a PBA, however the HSPA conducted output power measurements in this filing correlates with the HSPA output power measurements in a recent C2PC for this module (Grant date: 02/02/2009, same FCC ID) for which a PBA was submitted and permission to proceed was granted. Because this filing and the filing which was previously granted under the same FCC ID both provide the same output power results for the HSPA results due to the measurements being made in an external cradle and being applicable to both reports as both platforms were under test simultaneously, the PBA is deemed to be justified.





3: Grants for Other co-located Transmitter

The Client has stated that the corresponding Class 2 Permissive changes for the other colocated modules are outside their remit and it is assumed they are being progressed by either the respective grantees or other agents on their behalf. Consequently this application has only focused on the issues related to this module.

4: Co-transmission

The Bluetooth antenna is greater than 5cm from the WWAN antenna and the Bluetooth P_{Tx} is less than 60/f, therefore simultaneous transmission SAR was not required. The WWAN antenna is located greater than 5cm from all antennas except for the WLAN antenna. For the antennas which simultaneously transmit and are located > 5cm from each other, the KDB 616217 policy states that provided the antenna-antenna distance = 5cm AND antenna-user \geq 5cm AND \sum_{all} max 1g SAR <1.6W/kg, then simultaneous transmission SAR evaluation is not required. For the WWAN antenna and the WLAN antenna which are located within 5cm from each other, the FCC has granted special permission to use the \sum_{all} max 1g SAR <1.6W/kg criteria to determine simultaneous transmission SAR requirements. These antennas are both located at a distance greater than 15cm from the user and the \sum_{all} max 1g SAR = 0.102W/kg (WWAN) + 0.050W/kg (WLAN) = 0.152W/kg < 1.6W/kg, therefore simultaneous transmission SAR evaluation was not required.

5: Separation distance between antennas

Within Exhibit 12 there is a separate exhibit providing antenna location information for this laptop. Details pertaining to the antennas and cable specifications are also provided within Exhibit 12.

6: 900MHz SAR Dipole Validation and Probe

The Probe Calibration and Validation information within the test report relates to 900MHz which is not within 50MHz of the frequency of interest for GSM850, therefore the test lab has provided a justification to address the requirements within the test report.

The maximum SAR levels obtained are:

0.036 W/kg
0.041 W/kg
0.102 W/kg
0.035 W/kg
0.022 W/kg
0.024 W/kg
0.050 W/kg
0.043 W/kg

I underwent the FCC RF exposure training with the FCC in October 2008.

Yours sincerely

Vina Kerai

Certification Engineer

